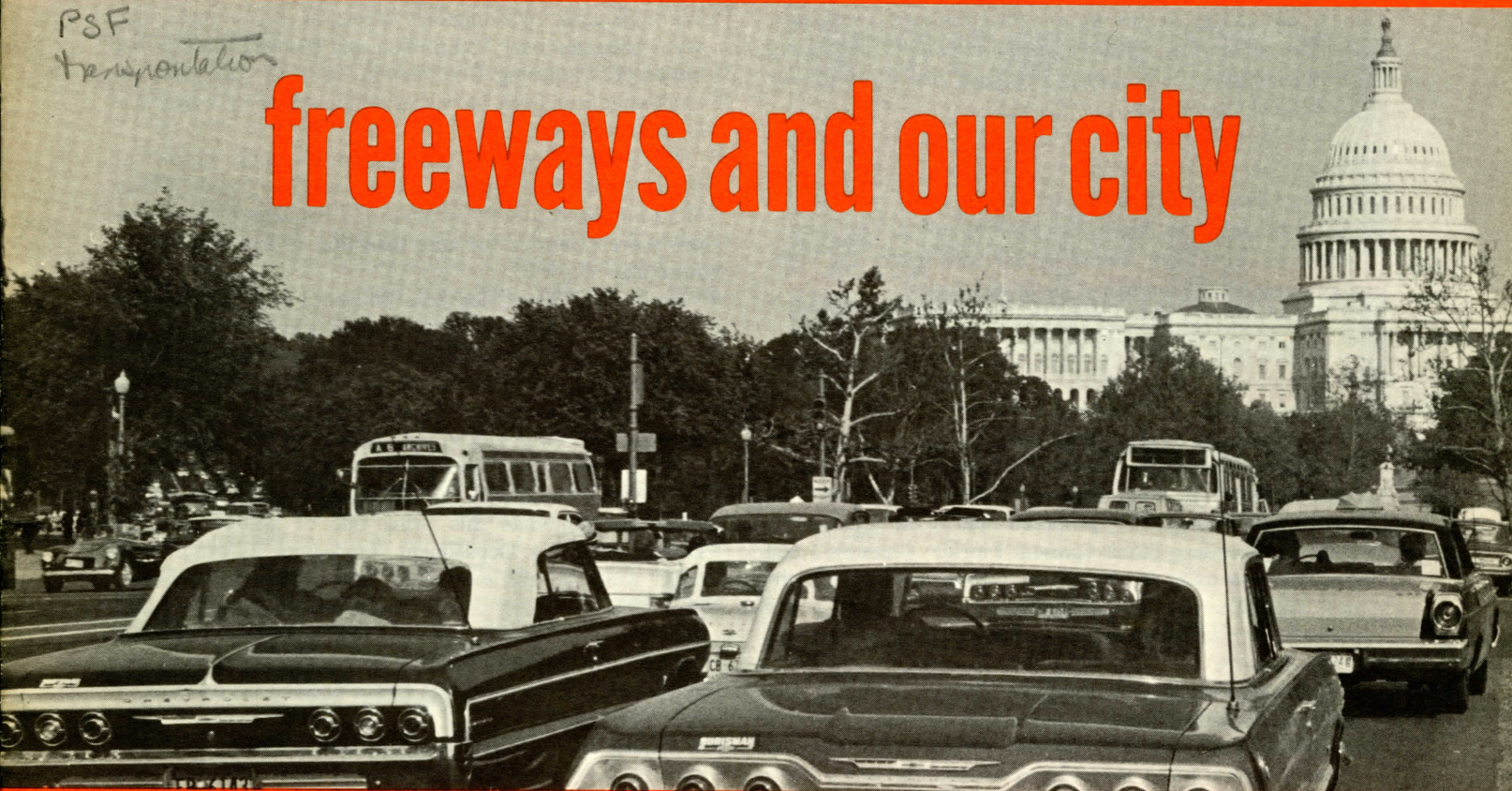




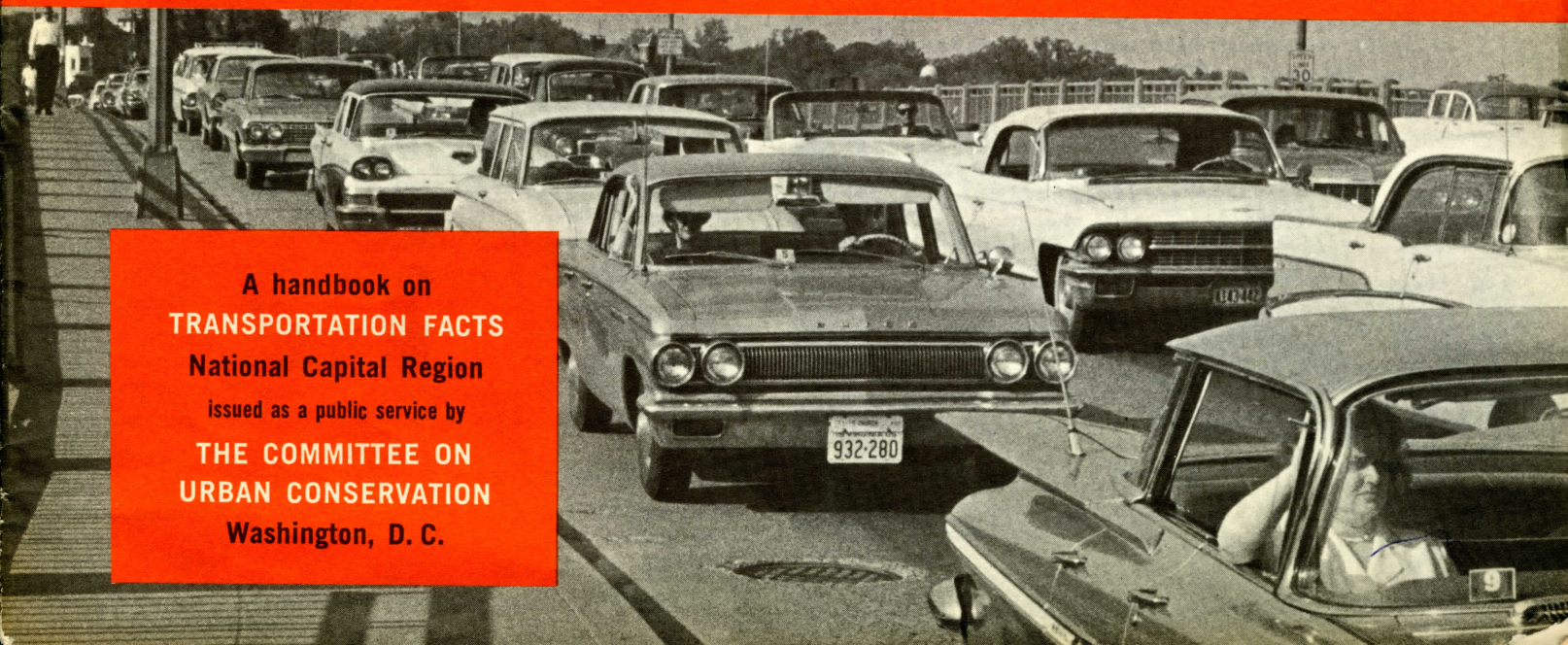
ISSUES CONFRONTING THE NATION'S CAPITAL . . .

PSF
transportation

freeways and our city



COSTS • DISPLACEMENT • SUBURBAN SPRAWL • ALTERNATIVES



A handbook on
TRANSPORTATION FACTS
National Capital Region
issued as a public service by
**THE COMMITTEE ON
URBAN CONSERVATION**
Washington, D. C.

foreword

In the past quarter century, 142 miles of new freeways have been constructed in the Washington metropolitan area. Today, the area has more freeways per capita and per acre than any other large urbanized area, Los Angeles included.

Within the next decade, 38 additional lanes of freeways are proposed from the Virginia and Maryland suburbs into the heart of Washington.

Throughout the Washington area, thousands of residents and hundreds of civic groups have voiced vehement objections to one or more of the new proposals. At the same time, area highway engineers resolutely claim that all of the added freeways are essential for a "balanced" transportation system.

It is not the purpose of this publication to dictate any answer to this controversy. Rather, it is an attempt to focus on the facts, to supply the general public with the basic facts on highways as they affect the city—where we have been, where we are, and where the highway engineers propose we go in the future.

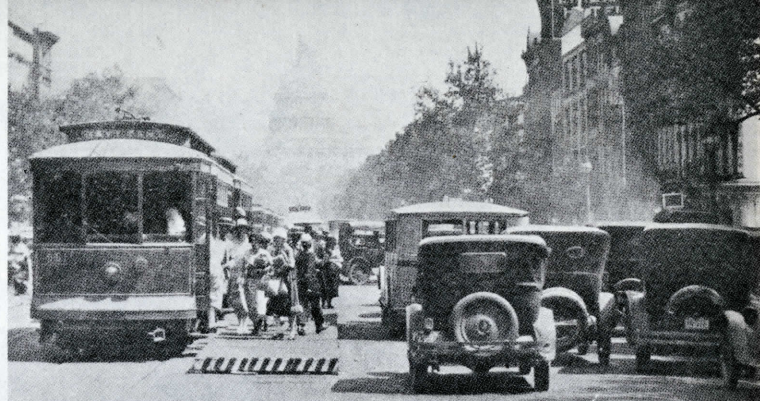
prelude (1790-1940)

Washington's planners have never been "pikers" when it came to highways. The original "L'Enfant Plan" of 1791 for the new Federal City proposed that of the 6,111 acres south of Boundary Street (present Florida Avenue), 3,606 should be set aside for highways. "Only a modern highway engineer, with his extravagant intersections, could compete with L'Enfant in this reckless wastage of precious urban land."¹

Although President Washington, Thomas Jefferson and the Congress insisted upon a substantial curtailment of this initial highway proposal, highway engineers in the last century have worked tirelessly to expand the city's highways.

The first, and perhaps the most notorious, of these appointed highway builders was "Boss" Shepherd. Angered by the slowness of street paving by the City of Washington, Congress in 1871 abolished the elected city council

Downtown Washington, 1925



Pennsylvania Avenue, forty years ago

and substituted a Presidentially-appointed Board of Public Works to take charge of all highways and other public works. Boss Shepherd ran this board single-handed. While he paved Washington's streets, he also in three short years obligated over \$20 million and plunged the city into bankruptcy, causing Congress in 1874 to take over the city's rule itself with its wishes administered by a Board of Commissioners.²

Successor Boards of Commissioners soon picked up where Boss Shepherd left off, so that by 1940 at least \$250 million had been invested in a highway network that was more extensive per acre than that of any other major American city.

Neither L'Enfant nor Boss Shepherd ever heard of the automobile. But the extensive highway system they helped build supplied Detroit with a ready market for the horseless carriage. Daily traffic on the "new" Highway Bridge in June 1911 averaged 388 streetcars, 1,010 horse-drawn vehicles and only 155 automobiles. By the summer of 1940, the streetcars were gone; so were the horse-drawn wagons; but there were 42,754 motor vehicles per day.

To accommodate this rising tide of automobiles, the District Highway Department stepped up its program of street widening and extensions, and private entrepreneurs promoted the razing of homes and businesses (other than their own) to provide more parking space. Plans for the "Grand Plaza" at 14th & D Streets, N.W., were forgotten in favor of turning it into a parking lot for government workers.

Transit meanwhile received no public assistance. Revenue passengers on the District's extensive streetcar system dropped from 170 million riders per year in 1919 to 132 million by 1937. Travel times increased as streetcars had to compete for street space with ever-increasing numbers of automobiles. Of all workers riding to central Washington, the ratio using transit declined from over 90% prior to World War I to 74% in 1925, 58% in 1930 and 53% in the mid 1930s, then recovered slightly to 58% by 1940 with the introduction of new PCC streetcars.

From many quarters—prominent among them the Washington Board of Trade—came the suggestion that Washington should start a subway.

But the highway promoters had other ideas. The problem of too many cars was not to be solved by finding more efficient alternatives, but rather by more highways.

Commencing with fiscal 1940, Congress provided that the District of Columbia would qualify, the same as the states, for Federal matching aid for highway construction.

¹ Lewis Mumford, *The City in History*, pp. 404-05 (1961).

² Constance McLaughlin Green, *Washington: Village and Capital, 1800-1878*, pp. 329-62 (1962).

Gen. Grant

the last 25 years

Since fiscal 1940, when Washington first became eligible for Federal aid matching funds for highways, \$400 million has been spent in the city for major highway improvements.³

This is more than had been spent for highways in the preceding 150 years of Washington's history.

It did not start out that way. The Highway Department's first "comprehensive, long-range plan," issued April 24, 1941, concluded:

"We are convinced that with rapid, direct, and comfortable service, mass transportation can and should supplant much of the individual vehicular service into the central business areas."⁴

The plan, however, had no definite transit proposals to implement this conviction. Instead, noting the Federal aid that was now available, the 1941 plan proposed the largest (until then) highway construction program in Washington's history, a plan commencing with fiscal 1940 that would cost almost \$50,000,000.

The plan kept growing. In 1941, Captain Whitehurst proposed just one freeway—the K Street Elevated Freeway that was later named after him. Since then, Washington's highway engineers have added and built the Suitland Parkway, New York Avenue Freeway, Kenilworth Avenue Freeway, Southwest Freeway and Anacostia Freeway.

In 1941, explaining his plan to Congress, Captain Whitehurst said, "We do not advocate another bridge in the vicinity of Key and Memorial Bridges. Another bridge would be bad planning." He urged only that the "old" Fourteenth Street Bridge be replaced. It has now been replaced with two bridges; Key Bridge has been widened to 6 lanes; and another six-lane Theodore Roosevelt Bridge built between Key and Memorial Bridges.

Across the Anacostia River, the 1941 plan proposed just one more bridge—the South Capitol Street Bridge. Since then, the highway builders have also widened the roadway on Benning Bridge, built a six-lane bridge at East Capitol Street and a new four-lane bridge at 11th Street, S.E.

Accompanying these new freeways and bridges has been a long list of widened arterial streets, their stately trees cut down to promote "free-flowing" traffic—13th St., N.W., Vermont-Sherman-New Hampshire Avenues, Rhode Island Avenue, New York Avenue, North Capitol Street, M Street S.W. and S.E., South Capitol Street, just to name a few.

From Washington's boundaries into the suburbs, old roads were widened. In addition, many new freeways and expressways were constructed—such as George Washington Memorial Parkway, Spout Run Parkway, Lee

³ D.C. Highway department projects, \$380 million; Park Service construction, \$20 million. This figure does not include another \$60 million appropriated since fiscal 1940 for so-called "minor" street improvements in Washington or \$122 million appropriated for major highway projects but not obligated prior to January 1, 1965.

⁴ "A Preliminary Report on Highway, Parking and Related Traffic Problems" (the "Whitehurst Plan"), p. 55 (1941). Captain Whitehurst was D.C. Highway Director until his death a few years after World War II.

Boulevard, Shirley Highway, Indian Head Highway, Suitland Parkway, Pennsylvania Avenue extended, Baltimore-Washington Parkway, Annapolis Freeway, 16th Street extended, Connecticut Avenue extended, all capped in 1964 by the completion of the 66-mile, \$190 million Capital Beltway.

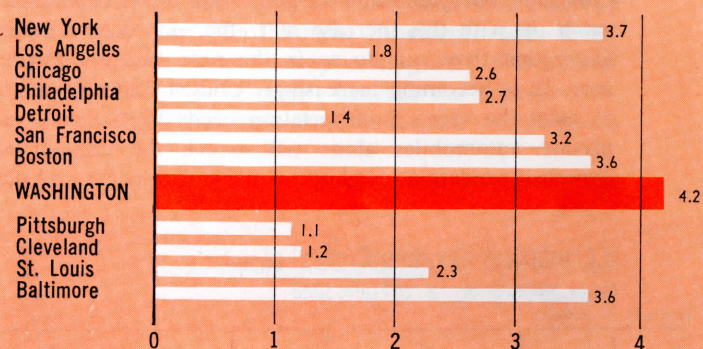
While data is not presently available on the total investment in new highways in the suburbs, 1940-65, it is probable that the cost at least matched the \$400 million spent within Washington.

By August 1964, the Washington area had 142 miles of freeways open to traffic—more freeways per square mile and per capita than any of the largest urbanized areas in the United States, and probably the world.

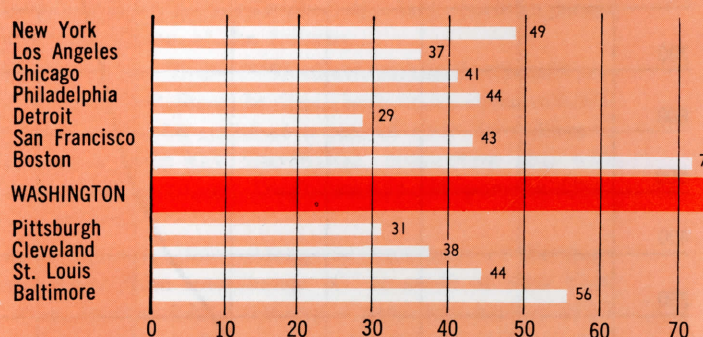
FREEWAY MILEAGE IN 12 LARGEST U.S. URBAN AREAS (Aug. 1964)

	Urbanized Area (Sq. Miles)	Urbanized Population	Freeway Mileage
New York	1,891	14,114,927	697
Los Angeles	1,370	6,488,791	242
Chicago	960	5,959,213	245
Philadelphia	597	3,635,228	160
Detroit	732	3,537,709	103
San Francisco	571	2,430,663	183
Boston	516	2,413,236	186
WASHINGTON	340	1,808,423	142
Pittsburgh	525	1,804,400	56
Cleveland	587	1,784,991	68
St. Louis	323	1,667,693	74
Baltimore	220	1,418,948	80

FREEWAY MILEAGE PER 10 SQ. MILES (Aug. 1964)



FREEWAY MILEAGE PER MILLION POPULATION (Aug. 1964)



Source: Automotive Safety Foundation, "Urban Freeway Development," p. 62 (1964).

Note: One-half of the Automotive Safety Foundation's funds come from the Automobile Manufacturers Association, the other half from over 600 companies and associations in the field of highway transportation and supply. "Congressional Quarterly Fact Sheet," Oct. 2, 1963, p. 9.

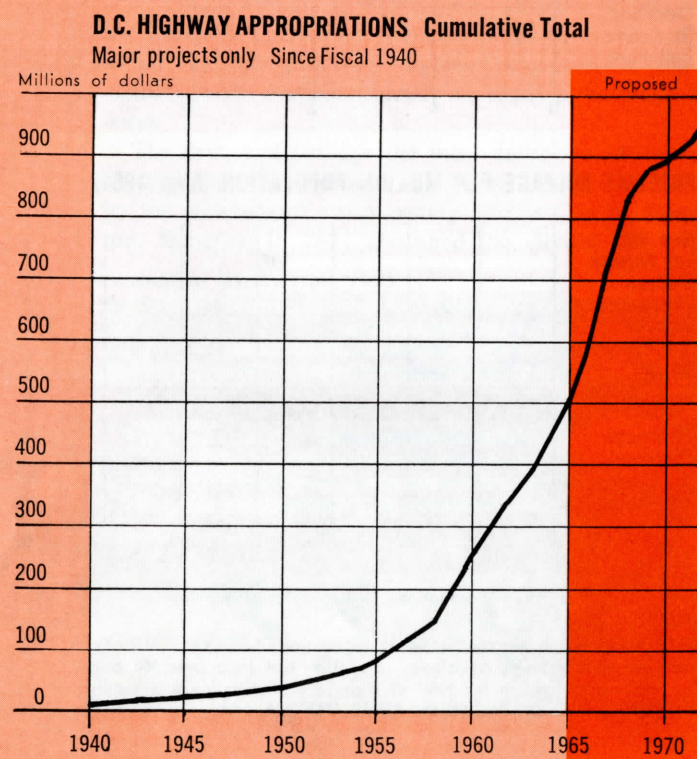
And what was done for public transit during this quarter century? Nothing. While Washington was spending \$400 million in major highway improvements to serve forecast "needs" of private automobile transportation, not a single cent of public funds was spent for public transit.

During World War II, it was recommended by outside consultants that Washington start a subway system by placing streetcars underground in the central city. Initially, after World War II, the D.C. Highway Department advocated this step. Instead, District authorities decided that the "most economical" solution was to eliminate streetcars entirely. They "impeded" automobile traffic and presented major engineering difficulties in the construction of the new highways being planned. As a result, it was ordered that all streetcar service be terminated, with the former tracks removed at the transit riders' expense.

the next 10 years

By 1960, when about \$250 million had been obligated in Washington for freeways and other major highway projects, it became evident that some other solution was necessary. The House and Senate District Committees declared:

"Washington, like every other large American city, has been suffering from steadily worsening traffic congestion. For more than a decade after World War II, there was a steady decline in transit ridership, and a rapid increase in the number of private automobiles on the streets and highways. The Highway Departments of the District of Columbia, Maryland and Virginia have never been able to catch up with this increase in traffic, nor does it appear likely that they can do so in the near future. Furthermore, it is becoming increasingly evident that any attempt to meet the area's transportation needs by highways and private automobiles alone will wreck the city—it will demolish residential neighborhoods, violate parks and play-



D.C. HIGHWAY APPROPRIATIONS Major projects only¹

Fiscal Year	D. C. Appropriation	Federal Aid	Total	Cumulative Total
1940	\$ 1,854	\$ 1,150	\$ 3,004	\$ 3,004
1941	1,611	785	2,396	5,400
1942	3,282	3,205	6,307	11,707
1943	1,955	497	2,452	14,159
1944	50	-----	50	14,209
1945	850	-----	850	15,059
1946	1,575	1,575	3,150	18,209
1947	3,490	2,200	5,690	23,899
1948	3,635	2,625	6,260	30,159
1949	3,775	2,800	6,575	36,734
1950	3,600	2,600	6,200	42,934
1951	2,846	2,846	5,692	48,626
1952	3,900	3,450	7,350	55,976
1953	3,036	1,820	4,856	60,832
1954	5,366	4,800	10,166	70,998
1955	8,545	8,355	16,900	87,898
1956	10,105	4,962	15,067	102,965
1957	10,253	4,825	15,078	118,043
1958	10,671	17,968	28,639	146,682
1959	7,712	44,657	52,369	199,051
1960	13,628	44,845	58,473	257,524
1961	9,482	30,442	39,924	297,448
1962	3,365	39,374	42,739	340,187
1963	5,029	42,776	47,805	387,992
1964	6,899	38,550	45,449	433,441
1965	9,385	65,437	74,822	508,263
Proposed:				
1966	9,390	72,965	82,355	590,618
1967	13,850	105,875	119,725	710,343
1968	13,707	99,248	112,955	823,298
1969	8,715	38,130	46,845	870,143
1970	6,773	18,072	24,845	894,988
1971	5,860	10,725	16,585	911,573
After 1971	24,500	24,500	49,000	960,573

¹ Does not include appropriations for street improvements (\$3.7 million proposed for fiscal 1966); reimbursements for major highway projects by D. C. Transit Co. and predecessor; or projects built by National Capital Parks (e.g., Suitland Parkway) or Bureau of Public Roads (e.g., Woodrow Wilson Bridge). Park Service expenditures on major highway projects equaled about \$20 million, 1940-65, and will add another \$20 million in the next decade, by current plans.

Source: Annual appropriations bills and periodic reports of D. C. Highway Department.

grounds, desecrate the monumental portions of the Nation's Capital, and remove much valuable property from the tax rolls."

To tackle the problem, Congress created the National Capital Transportation Agency (NCTA) with the statutory mandate to chart a comprehensive, balanced transportation system of highways and rapid transit that gave "special consideration to the . . . early development of a subway."

Instead of retrenching on highway plans and looking to the NCTA for guidance, the area highway departments reacted to this legislation by a rapid expansion of their freeway plans. When the NCTA was created, the District's major highway program (base year fiscal 1940) was \$575 million. By the beginning of 1965, it had climbed to over \$960 million, an increase of \$385 million in four and a half years.

By comparison, the NCTA's recommended plan, transmitted to President Kennedy on November 1, 1962, recommended that the total D.C. investment for highways not exceed \$688 million (\$113 more than had been planned when the agency had been created). In addition, the NCTA recommended the expenditure of another \$525 million for highways in suburban areas and by the Park Service, substantially more than had been planned. In the same report, the NCTA recommended that \$681

million be spent constructing a subway system, of which \$413 million would be spent in Washington and \$268 million in suburban areas.

NCTA RAPID TRANSIT PROPOSALS	Nov. 1962	Jan. 1965
Construction Costs		
Planning & Engineering	\$ 51,600,000	\$ 31,600,000
Right-of-way	52,200,000	20,500,000
Construction & Contingencies	577,100,000	352,800,000
Total Construction Cost	680,900,000	404,900,000
Within District of Columbia	412,500,000	325,800,000
Suburban Maryland & Virginia	268,400,000	79,100,000
	680,900,000	404,900,000
Vehicles	111,900,000	26,100,000
Total Investment	792,800,000	431,000,000

Source: 1962: NCTA Report to the President, Nov. 1, 1962, and Appendix, Vol. I, p. 41.

1965: NCTA, *Engineering Supplement, Transit Development Program 1965* (Jan. 1965); right-of-way cost apportioned \$4 million to suburban areas and remainder to District of Columbia.

This grandiose plan was met with ridicule by the highway planners. Because the NCTA recommended a highway system within Washington costing 20% less than it planned, the D.C. Highway Department accused the NCTA of trying to "kill" freeways to "sell" subways. The District Commissioners endorsed this position and it soon became the hue and cry of the Highway Lobby.

The Washington *Post* ridiculed the NCTA's plan as "advocacy," that "fails to convince one that the present road construction program is in error."⁵ The Washington *Star* accused the NCTA of trying to "cut the heart out of" Washington's freeway system.⁶

Despite President Kennedy's endorsement, legislation to implement the NCTA's rapid transit proposal was scuttled, and the NCTA quietly abandoned any further attempts to plan for a balanced transportation system. Although President Kennedy directed the D.C. Commissioners in May 1963 to make a complete reappraisal of their freeway program in the light of the NCTA's data and the social and economic consequences of the proposed freeways, the reappraisal was never made. The District Highway

GROWTH OF PROPOSED D.C. TRANSPORTATION SYSTEM

(Thousands of dollars) Base Year Fiscal 1940

As Proposed by D.C. Highway Department

Major Highway Projects	Date	Financed	Proposed	Total	Proposed Subways	Total
	1/1/42	\$ 5,400	\$ 44,450	\$ 49,850	\$ 0	\$ 49,850
	1/1/47	23,899	48,815	72,714	35,000	107,714
	1/1/54	70,998	111,909	182,907	0	182,907
	1/1/60	257,524	317,674	575,198	0	575,198
	1/1/61	297,448	362,346	659,794	0	659,794
	1/1/62	340,187	486,724	826,911	0	826,911
	1/1/63	387,992	453,044	841,036	0	841,036
	1/1/64	433,441	400,192	833,633	0	833,633
	1/1/65	508,263	452,310	960,573	325,800	1,286,373

As Proposed by National Capital Transportation Agency

11/1/62	387,992	299,991	687,983	412,500	1,100,483
---------	---------	---------	---------	---------	-----------

(Rejected by D. C. Commissioners as an unwarranted attempt to "kill" freeways to "sell" subways.)

⁵ Post editorials "The Future Subway" (Oct. 27, 1962), "Rails and Roads" (Nov. 2, 1962).

⁶ Star editorial "Transportation Plan" (November 4, 1962).

Funds Obligated for Major Transportation Projects

July 1, 1939, to Dec. 31, 1964 (D.C. only)

Highways	\$379,041	100%
Subways	0	0%

Funds Required for Major Transportation Projects

Jan. 1, 1965 to June 30, 1972 under NCTA 1962 Proposal (D.C. only)

Highways	\$308,942*	43%
Subways	412,500	57%

Proposed Obligations for Major Transportation Projects

Jan. 1, 1965 to June 30, 1972 (D.C. only)

Highways	\$581,532*	64%
Subways	325,800	36%

* Including \$129,222 thousand appropriated but not obligated as of January 1, 1965.

Department's answer was to expand its major highway construction program by another \$127 million during 1964.

As 1965 opened, the District's program of major highway projects had risen to over \$960 million (\$1 billion, including Park Service projects in Washington); the NCTA's proposed rapid transit system had shrunk to \$326 million within the District of Columbia, and only \$79 million in suburban Maryland and Virginia.

current highway proposals

"INNER LOOP" FREEWAYS

South Leg (Route 695)—Between the Southwest Freeway and the West Leg (or Potomac Freeway), now under construction, a six-lane freeway costing over \$32 million is proposed that would tunnel beneath the Lincoln Memorial and the Tidal Basin and be located primarily on park lands.

Center Leg (Route 95)—From the eastern end of the Southwest Freeway, an 8-lane freeway is proposed that would tunnel beneath the Mall to the north, emerging as an open trench between 2nd and 3rd Sts., N.W., bisecting the Federal City and most east-west streets. Cost is estimated at \$73.5 million, of which over \$25 million would be for condemnation, displacing (according to estimates by the Highway Department) 1,690 residents. The Highway Department, in cooperation with Downtown Progress, is studying construction of a large parking garage above one section of the freeway.

Interchange "C" (Route 295)—Between the Southeast Freeway and the 11th Street bridges (both under construction), 26 acres would be razed at a cost of over \$6 million to construct a three-way interchange, connecting also with the proposed East Leg. Displacement: 500 persons. Cost: \$21.7 million.

East Leg (Route 295)—Along the west bank of the Anacostia River from Interchange "C" to north of New York Avenue, another 8-lane freeway is proposed, costing \$52.8 million (including \$16 million for condemnation) that would take 213 acres, including 102 acres of parkland, and displace 2,060 persons.

North Leg-West Section (Route 66)—Between the interchange with the Potomac Freeway at K Street (now being completed) and a mid-city junction with the Center Leg,

another 8-lane freeway is planned that would cost \$84.1 million, almost half of which (\$41 million) would be for property condemnation. Highway Department estimate of displacement: 34 acres, including the homes of 3,540 residents. The prospect of tunneling parts of this freeway is now being studied.

North Leg-Center Section (Route 95)—From the junction with the Center Leg to the junction with the East Leg, the North Leg would continue as a ten-lane freeway, costing \$53.8 million (including \$26.8 million for condemnation), taking 55 acres and displacing 4,000 persons.

9th Street and 14th Street Expressways—Leading to the 14th Street bridges and Southwest Freeway from Downtown, there are proposed two tunneled freeways beneath the Mall, similar to the completed 12th Street Expressway, that would cost \$14.1 million.

“INTERMEDIATE LOOP” FREEWAYS

Missouri Avenue Expressway—In the late 1950s, Military Road, from 14th Street N.W. to 27th Street N.W. was rebuilt to expressway standards. It is now proposed to extend this eastward by converting Missouri Avenue into an expressway, ultimately 10 lanes wide with six lanes depressed and four lanes of “service roads” from the terminus of Military Road at 14th Street to 8th Street, N.W. Current cost of the project is estimated at \$4.4 million (\$1 million for condemnation), displacing 200 residents.

“Fort Drive” Freeway—East of 8th Street, N.W., the projected “intermediate loop” would continue through parklands and residential areas in a wide loop to East Capitol Street, east of the Anacostia River. Total cost: \$62 million. Although condemnation costs are estimated to be \$11 million, taking 33 acres, the Highway Department has made no estimate of displacement.

West of Military Road, the Highway Department has abandoned earlier plans for continuation of the “intermediate loop.” Formerly, it would have looped southwest, near Nebraska Avenue, then proceed through the length of Glover-Archbold Park to the Potomac River.

RADIAL FREEWAYS

Potomac Freeway Extension and Three Sisters Bridge (Route 266)—Construction of the Potomac Freeway began five years ago, when it was proposed to widen Whitehurst Freeway from 4 lanes to 8, terminating with a redesigned interchange at Key Bridge. Current plans call for elimination of existing links with Key Bridge, and instead proceeding westward with a 12-lane freeway (8 through-lanes and 4 lanes of “relocated” Canal Road) to a new 6-lane bridge across the Potomac River near Georgetown Reservoir and a new 4 or 6-lane Palisades Parkway to Chain Bridge. Cost, within D.C., would be \$35.4 million, including \$16 million for condemnation, displacing 40 residents and 400 employees. Of the 50 acres razed, 36 are presently park lands (Glover Archbold Park, C&O Canal reservation).

Palisades Parkway—A Park Service project, this would link the Potomac Freeway (from wherever it finally terminates) with the Capital Beltway at Cabin John. Portions of the Montgomery County part are now open; its size and location within the District remain indefinite. From Chain Bridge to the Capital Beltway it would be 4 lanes

“BOX SCORE” OF NEWSPAPER EDITORIALS ON PROPOSED FREEWAYS

(five years ending March 31, 1965)	STAR	POST
Radial Freeways		
Third 14th St. Bridge	For(2)	For(1)
Three Sisters Bridge & Potomac Freeway Extension	For(39)	For(14)
Palisades Parkway	For(3)	For(2)
Northwest Freeway	For(5)	For(5)
Glover-Archbold Parkway	For(3)	Against(2)
Parkway Extension through Zoo	For(4)	—
Freeway through Rock Creek Park	For(1)	Against(3)
North Central Freeway	For(7)	For(6)
Northeast Freeway	For(3)	For(1)
Parkway along Potomac in P. G. County	For(7)	—
Extension Mt. Vernon Parkway	For(1)	—
Widen Shirley Highway*	For(8)	For(3)
Route 66 through Arlington	For(3)	—
Widen Geo. Wash. Parkway to T. R. Bridge	For(2)	—
Freeway parallel to Dulles Airport Road	For(2)	—
Inner Loop Projects		
Generally	For(5)	For(2)
South Leg	For(12)	—
E Street Expressway	For(2)	For(2)
North Leg	For(6)	For(5)
Center Leg	For(7)	For(2)
Southeast Freeway	For(1)	—
Interchange “C”	For(2)	For(1)
East Leg—11th St.	For(10)	For(5)
East Leg along Anacostia River	For(2)	For(2)

* Star favored widening to 8 lanes; Post to 6 lanes.

wide. As originally proposed in 1957, this project would have razed 43 homes; no recent estimate has been made public.

Route 266 (Virginia)—From the proposed Three Sisters Bridge site into North Arlington, the six-lane freeway would continue as Alternate Route 66 (266) to a junction with Route 66 through residential north Arlington.

Route 66 (Virginia)—The Washington gateway (Theodore Roosevelt Bridge), has been completed. From the Virginia shore, this would continue as a 10-lane freeway through Rosslyn until it picks up Route 266, then continue through Arlington as 10 or 8 lanes to the Capital Beltway.

Third 14th Street Bridge and widened Shirley Highway (Route 95)—The District has now added plans to “replace” the old 14th Street Bridge a third time. The third structure would also be four lanes wide, costing \$9.4 million, and would lead to a widened 8-lane Shirley Highway, the center two lanes of which would be reversible.

North Central-Northeast Freeway (Routes 95 and 70-S). From the proposed junction of the North and East Leg Freeways near Harmony Cemetery near Brentwood Village in Northeast Washington, a ten-lane freeway, occupying a right-of-way over 300 feet wide, is proposed to junctions with the “intermediate loop” near Fort Totten Park. In this area, the freeway would split into the “North Central Freeway” (70-S), 10 lanes wide, through Takoma Park and Silver Spring to the Capital Beltway, and the “Northeast Freeway” (95), 8 lanes wide, through northern Prince Georges County toward Baltimore. The District portion would cost \$75.2 million, including \$36.5 million for condemnation, taking 146 acres. The latest highway department estimate of displacement is 2,194. Independent door-to-door counts by the D.C. Citizens Committee on

the Freeway Crisis finds actual displacement would be closer to 4,000. The Maryland portion of 70-S would, according to the highway engineers, cost \$53.2 million, including \$24.3 for condemnation, displacing 1,761 residents. No current estimates exist for the cost or displacement of the Prince Georges portion of Route 95.

North Leg-East Section (Route 295)—Parallel to New York Avenue, but to the north of the railroad tracks, the District also proposes a 6-lane freeway from the North & East Leg interchanges to the Kenilworth Avenue interchange in Maryland. This project would cost an estimated \$34.2 million, including \$23.0 for condemnation, razing 94 acres (53 acres of parkland) and displacing 580 persons.

Excluding consideration of the widened arterial streets, the freeways now on the planning boards would add 38 lanes of freeways entering and leaving the District of Columbia—ten from Virginia (4 on third 14th Street Bridge, 6 on Three Sisters Bridge), 14 from Montgomery County (4 on Palisades Parkway, 10 on North Central Freeway), and 14 from Prince Georges County (8 on Northeast Freeway, 6 on North Leg-East Section). They would provide 20 inbound freeway lanes, capable of pumping another 40,000 motor vehicles per hour into Washington.⁷

WIDENED ARTERIAL STREETS

Within the District, more than \$30 million of widened or extended arterial streets are also proposed. Prominent among the street widening projects are:

- 16th St., N.W. (M St. to D.C. line), \$4,880,000;
- New York Ave., N.E. (Florida Ave. to Bladensburg Rd.), \$3,324,000;
- Michigan Ave., N.E. (7th St. to D.C. line), \$1,680,000;
- Massachusetts Ave. (7th St. N.E. to 1st St., N.W. and

⁷Two of the ten lanes on the proposed North Central Freeway would be reversible, operating inbound in the morning rush hour and outbound in the evening rush hour. According to the Bureau of Public Roads, the “commonly accepted average” for the hourly capacity of an urban freeway is 2,000 vehicles. Bureau of Public Roads, “Increasing the Traffic-Carrying Capacity of Urban Arterial Streets (The Wisconsin Avenue Study)”, p. 26 (1962).

Downtown Los Angeles—the present “freeway capital of the world”



9th St., N.W., to Idaho Ave.), \$2,670,000;

South Capitol St. (South Capitol St. Bridge to D.C. line), \$2,040,000;

Oregon Ave., N.W. (Military Rd. to Chestnut St.), \$1,425,000;

Blair Rd., N.W. (Aspen St. to D.C. line), \$1,230,000;

12th & 13th Sts., N.E. (Michigan Ave. to South Dakota Ave.), \$1,120,000;

South Dakota Ave., N.E. (Rhode Island Ave. to Bladensburg Rd.), \$670,000.

The two principal street extensions proposed are Southern Ave. (Pennsylvania Ave. to South Capitol St.), \$4,600,000; and Minnesota Ave., N.E. (Sheriff Rd. to Eastern Ave.), \$1,105,000.

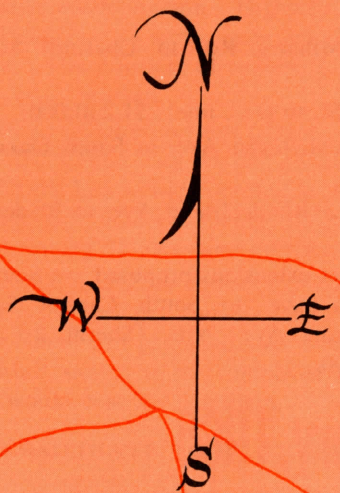
taking inventory, 1965

Where, after a quarter-century of totally highway-dominant transportation development, does Washington stand today? Has the \$400 million investment in new highways for Washington, matched by another \$400 million in the suburbs, created the type of city their planners envisaged?

Expansion of the central business district, greater economic vitality for Washington, less urban sprawl, greater traffic safety—all of these were among the rewards promised by the original Whitehurst Plan of 1941, with its \$50 million proposed capital outlay, primarily in radial trunk highway improvements.

Initially, most of these promises came true—but not because of the plan. Hardly had work begun when World War II came; most highway construction was suspended and the discouragement of auto travel became an object of national policy with strict gasoline rationing and a suspension of auto production.

A few months after Hiroshima, however, road-building began in earnest. And, within a few years, Washington, the Nation’s Capital, was itself suffering from a severe case of fall-out sickness from which it still has not recovered.



Existing and Proposed Freeways

WASHINGTON METROPOLITAN AREA

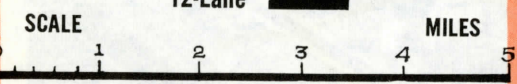
Complete or under construction

(in color)

Proposed (black)

(as of May 1965)

- 2-Lane
- 4-Lane
- 6-Lane
- 8-Lane
- 10-Lane
- 12-Lane



the disappearing Washingtonian

According to D.C. Budget Office calculations, Washington's population reached its peak (920,000) in 1947. Since that time, there has been a net *loss* of over 100,000 Washington residents. During the same period of time, population in suburban Maryland and Virginia increased from 493,000 to 1,534,000—an increase of over 200%. Planners call it "sprawl."

"Nobody wants to live, any more, [among] the disturbances which the automobile and truck traffic engender.

"Families with children flee the melee of men and machines, into the suburbs, and when they do so in sufficient numbers they create identical conditions in outlying areas and then flee even farther, recreating the problems. People with enough money buy lots of land in the suburbs and exurbs in order to protect their lives, their health and their privacy and thus, depending on the economic status of the citizen, we experience suburban sprawl neatly compartmentalized into subdivisions of varying lot sizes determined by the size of the paycheck.

"Retail organizations follow their customers, settling either in strips along suburban highways or in shopping centers. Metropolitan areas spread farther and farther, eating up landscape and countryside at an alarming rate, until they flow together into an amorphous, disorderly, unurban conglomeration for which the name megalopolis has been coined.

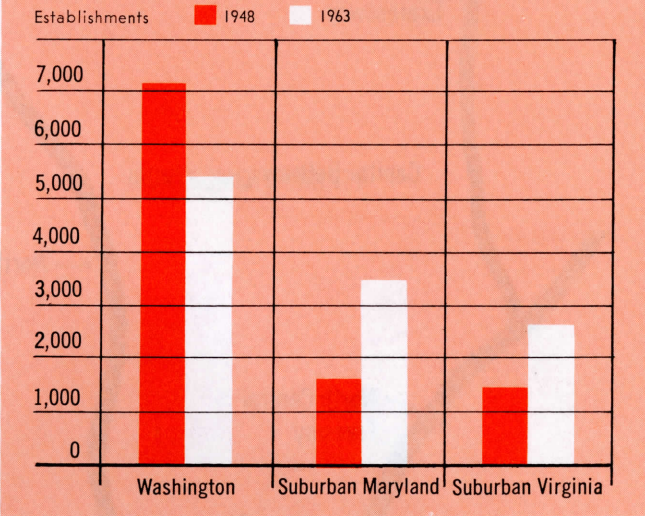


"With the growing distance from the original urban core, it becomes increasingly difficult and inconvenient to reach it. Surrounded by blight and slum formation it languishes economically and there is a danger that our metropolitan regions will soon resemble gigantic doughnuts with all the dough on the outside and a hole in the middle."

Instead of feeding more customers to Washington stores, the Washington retailer has discovered, to his chagrin, that the new highways have been draining customers to the suburbs. Between 1948 and 1963, according to Census data, Washington lost over one-fourth of its retail establishments. Despite the increased standard of living, retail sales in Washington in 1963 were no higher than they had been 15 years before.

⁸ Victor Gruen, "The Appearance of the Federal City," address before second annual Community Appearance Conference, sponsored by Washington Board of Trade, Jan. 5, 1962.

RETAIL BUSINESS ESTABLISHMENTS IN AREA



RETAIL TRADE, WASHINGTON METROPOLITAN AREA, 1948-63

	1948		1963		Change 1948-63	
	Establishments	Sales (\$1,000)	Establishments	Sales (\$1,000)	Establishments	Sales (\$1,000)
Dist. of Columbia	7,074	1,410,000	5,396	1,417,703	-1,678	+ 7,700
Montgomery Co.	737	132,000	1,631	583,414	+ 894	+ 451,500
Prince Georges Co.	877	100,000	1,805	512,221	+ 928	+ 412,200
	1,614	232,000	3,436	1,095,685	+1,822	+ 863,700
Alexandria Co.	506	90,500	621	175,511	+ 115	+ 85,000
Arlington Co.	541	119,000	809	328,276	+ 268	+ 209,300
Fairfax Co.	400	34,500	1,154	349,747	+ 754	+ 315,200
	1,447	244,000	2,584	853,534	+1,137	+ 609,500
Area Total	10,135	1,886,000	11,416	3,366,922	+1,281	+1,480,900

Source: U.S. Census Bureau; all sales figures adapted to 1963 dollars based upon B.L.S. consumer price index.

During the same 15-year span, retail sales in suburban Maryland and Virginia increased from \$476 million in 1948 to \$1,949 million in 1963 (both years measured in 1963 dollars), an increase of more than 300%. Washington's share of total area retail sales shrank from 75% in 1948 to only 42% by 1963.

Being the center of government, Washington's employment has steadily increased, but not at the ratio of increased area employment. In 1947, over 80% of area employment was in Washington. By 1960, it had dropped to 62%. And, of those working in Washington, a declining number lived in the city; by 1960, over 44% of those earning a living in Washington lived and paid their taxes in the suburbs.

PLACE OF WORK, AREA RESIDENTS (percentage)

	Work in D.C.	Va.	Md.	Outside Area
1947				
District residents	90.9	3.3	2.8	2.9
Suburban Va. residents	53.7	40.0	2.6	3.8
Suburban Md. residents	64.7	3.1	28.8	3.5
All area residents	80.4	9.2	7.3	3.2
1960				
District residents	86.5	4.4	7.4	1.7
Suburban Va. residents	43.2	53.0	1.7	2.2
Suburban Md. residents	48.0	2.3	45.6	4.1
All area residents	62.2	16.8	18.5	2.6

PLACE OF RESIDENCE, D.C. WORKERS (percentage)

	1947	1960
Washington	75.3%	55.8%
Suburban Virginia	10.7	18.7
Suburban Maryland	14.0	25.5

Source: Bureau of the Census, Current Population Reports, Series P-60, No. 4 (1948); 1960 census.

vanishing land

The total land area of Washington, D.C., is 62.5 square miles or 40,000 acres.⁹ It won't grow any larger.

As the Nation's Capital, a city with a superb park system, and a city that has proved a choice target of highway builders for a century and a half, little of these 40,000 acres is left for residential, commercial and industrial use—and what little remains is eroding away at an alarming rate.

In 1910, it is estimated that the total taxable land in Washington was 20,758 acres, or 52% of the land area. By July 1, 1964, this had dwindled to 14,082 acres, barely 35% of the entire city.

The D.C. Assessor keeps detailed records of the diminishing inventory of residential, commercial and industrial property subject to taxation. Accurate records of the amount of land consumed by highways are not maintained.

The last attempt at a thorough inventory of the District's land resources was in 1948 when the National Capital Planning Commission found that there were 9,816 acres of streets and alleys, 539 acres of circles and triangles within such streets and 1,149 acres of parkways. Including park roads (not separated from parks in this 1948 enumeration), the total acreage devoted to highways in Washington may then have already exceeded 12,000 acres.

Where once new highways lured Washington residents to the suburbs, today new highways are forcing them there. From July 1, 1948, to July 1, 1964, District highway construction consumed another 337 acres:¹⁰

Land use (in acres)	Taken for highways	Less closed streets & alleys	Net loss
Residential, commercial & industrial	238.0	109.4	128.6
Publicly-owned lands (mostly parkland)	311.1	106.7	204.4
Institutional land	4.9	0.8	4.1
Total	554.0	216.9	337.1

Of the \$225 million appropriated for District freeways and bridges built since World War II or currently under construction, \$33 million, or 15% of the total cost, went for condemnation of land.

The 15 new freeway and bridge projects now on the District's drawing boards would cost \$553 million, of which \$203 million (or 37%) would be for condemnation. On several of the projects, notably the North Central-Northeast Freeway, the Center Leg north of the Mall, the North Leg and the Potomac Freeway extension, condemnation costs are estimated to exceed construction costs.

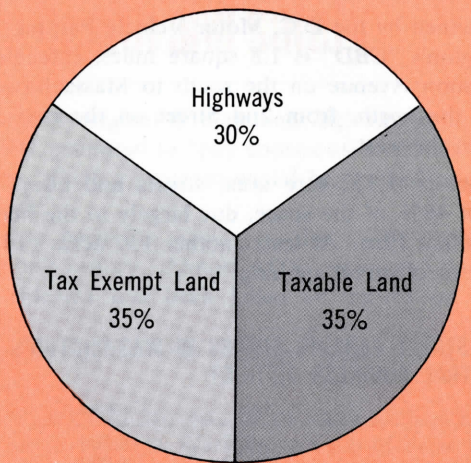
The D.C. Highway Department estimates that its highway program would take 694 acres of land within the next six years, including 180 acres of residential property, 50 acres of commercial, 176 acres of industrial, 247 acres

⁹ 1948 land use survey of National Capital Planning Commission, adjusted for subsequent land fill on Southwest waterfront and along Anacostia River.

¹⁰ D.C. Highway Department, "Financial and Project Data for Highway Program," April 1965 revision.

¹¹ D.C. Highway Department, "Financial and Project Data for Highway Program," April 1965 revision.

CURRENT LAND USE, DISTRICT OF COLUMBIA



Source: D.C. Assessor records

of park and other Government-owned property, 24 acres of schools and 17 acres of churches, cemeteries and other tax-exempt institutional property.¹¹

At this rate, coupled with condemnation for other public uses (e.g., Federal offices, District schools and public housing), it would take less than another decade for Washington to have more acres in highways than in all taxable uses (residential, commercial and industrial) combined.

The District's annual loss in property taxes alone would be at least \$2 million. The resulting loss of sales, personal income and corporate taxes can only be speculated, but since property tax is about one-third of the total revenue of the District's General Fund, it is likely that the total annual tax loss would exceed \$6 million—a tax burden that would have to be shifted to the declining remnant of the District's tax-producing property.

the hole in the middle

Three years ago, the planner and architect Victor Gruen commented that Washington, like many other large metropolitan areas, was beginning to resemble a "gigantic doughnut with all the dough on the outside and a hole in the middle."

That hole is getting bigger all the time.

At the heart of Washington, its "central business district," fully 60 percent of the land area today is devoted to the function of moving and storing motor vehicles.

CENTRAL BUSINESS DISTRICT DATA WASHINGTON AND FOUR OTHER MAJOR CITIES

City	Acres in CBD	Highways	Parking	Highways & Parking
Washington	1,152(100%)	553(48%)	157(14%)	710(62%)
Los Angeles	400(100%)	140(35%)	84(21%)	224(56%)
Boston	500(100%)	215(44%)	15(3%)	230(47%)
New York	5,555(100%)	2,260(41%)	240(4%)	2,500(45%)
Philadelphia	1,395(100%)	487(35%)	93(7%)	580(42%)

Source: American Municipal Association, "The Collapse of Commuter Service", p. 12 (1960), Department of City Planning, City of Los Angeles.

National Capital Planning Commission 1948 Washington land use study; off-street parking for Washington estimated from reported spaces in lots and garages, compiled by D. C. Motor Vehicle Parking Agency, as of June 1, 1964, converted to acreage on basis of 200 spaces per acre for lots and 800 spaces per acre for garages.

As defined by the D.C. Motor Vehicle Parking Agency, Washington's "CBD" is 1.8 square miles, extending from Constitution Avenue on the south to Massachusetts Avenue on the north, from 2nd Street on the east, to 23rd Street on the west.

Within this 1,152-acre area, streets and alleys already pre-empt 48% of the space, due largely to the heritage of the L'Enfant Plan. At least another 157 acres (14%) are devoted to off-street parking.

OFF-STREET PARKING SPACES IN WASHINGTON'S CENTRAL BUSINESS DISTRICT¹

Date	Lots	Garages	Total
1930	900	4,100	5,000
1940	12,000	6,000	18,000
1946	11,303	6,236	17,539
1953			30,300
Sept. 1, 1955	24,190	11,156	35,346
Aug. 15, 1956	24,942	12,180	37,122
Aug. 1, 1958	25,422	14,372	39,794
Sept. 1, 1959	25,651	15,436	41,087
Sept. 1, 1960	26,517	16,110	42,627
June 1, 1961	26,649	16,910	43,559
June 1, 1962	26,505	17,188	43,693
June 1, 1963	26,785	18,409	45,194
June 1, 1964	26,733	21,243	47,976

¹ As defined by Motor Vehicle Parking Agency (area bounded by Constitution and Massachusetts Avenues, 2nd and 23rd Streets, N.W.).
Source: 1930: National Capital Planning Commission, "Parking and Garage Problem of the Central Business District," p. 19 (1930).
1940: D. C. Highway Department Travel Record.
1946: 1953: NCTA files.
1955-64: D. C. Motor Vehicle Parking Agency

In 1930, there were 5,000 off-street parking spaces in this area. By 1940, there were 18,000. After World War II, this number increased again, surpassing 35,000 in 1955, 40,000 in 1959 and 45,000 in 1963. By June 1, 1964, the total had reached 47,976.

Within this area, where homes and offices once stood, parking lots now abound. This has not been through any public condemnation. The wrecking has been privately sponsored, although indirectly promoted through District tax policies. The owner of aging residential or commercial properties must pay taxes on both the land and improvements. If the "improvement" is razed to substitute a parking lot, his taxes decline. And, with high central city employment and ample highway space to the central city, there is a ready market to fill the parking lot with revenue patrons.

This process has not been limited to the CBD. Long ago, the wrecking ball extended outside this zone into other parts of the original "Federal City." Combined with the displacement caused by new highways and expanded Federal office-building complexes, the residents of L'Enfant's original Federal City are fast being driven out.

In 1940, the population of the Federal City was 291,868. By 1950, it had dropped to 278,660. By 1960, it had plummeted to 203,920—a 30% loss in population in the

¹² "Highway Projects Doom Homes in Foggy Bottom," Washington Post, January 1, 1962.
¹³ Based on May 1962 estimate by Highway Department that this project would destroy 160 dwelling units. House District Committee Hearings on "Accelerated D.C. Highway Program," p. 94 (1962).
¹⁴ D.C. Highway Department, "Financial and Project Data for Highway Program," April 1965 revision.

heart of Washington in the space of only 20 years. Since 1960, the population in the Southwest urban renewal area undoubtedly has increased. Offsetting this, however, has been the wrecking ball in other parts of the Federal City. The E Street Expressway, West Leg of the Inner Loop and the approaches to Theodore Roosevelt Bridge took the homes of at least 810 persons;¹² the Southeast Freeway took the homes of at least 500 more.¹³ The North Leg, Center Leg and East Leg Freeways are estimated to require the destruction of the homes occupied by another 9,600 persons.¹⁴ The theory appears to be that the central city is for cars, not people.

relocation

Legislation passed in 1964 now requires the payment of \$200 to each family displaced to make room for more cars. This is to cover "moving expenses." But, for most of these freeway DPs, there is no place to move. They are largely middle and low income families; over 80% are Negro.

It is not that the highway engineers are racially or economically biased. They are, however, conscious of condemnation costs. To keep these to a minimum, they conventionally aim for the "cheapest" land—parklands (for which they pay nothing) and the less affluent neighborhoods and business sections, where property appraisal will be lower. Within Washington, these are largely areas populated by Negroes, the elderly, the poor, or small businesses.

Few of the 15,000 or more District residents presently in the path of proposed freeways know of the fate planned for them. A study by the Health & Welfare Council of the North Leg-West Section in 1963 discovered that the majority of residents living in the North Leg path had no knowledge of the proposal at all. Typical of the responses were:

"Well, this is the first time I've known the Government to send anyone around to show us maps and all. Tell 'em, thanks for that, lady."

"If this is another scheme to improve transportation for people living out of the District primarily, then the whole idea should be abandoned."

"I guess we do need good roads but I don't see how making people move to put in roads is going to help. Where are they going to put me?"

"I think it's just awful. All or many of these people have been living in this neighborhood for forty years or more. I guess it would just about kill some of these old people around here and it would make everybody mad, but the government's going to do whatever it wants, so why worry about it."

"There's no need for a freeway. What we need is a subway or some way to bring all these Maryland and Virginia people in to their work so they won't clutter up our streets with their parking right in front of our doors."

"It just isn't just for these people out in Maryland and Virginia with such beautiful homes to expect us to give up the little we have just so they can get into the city

more conveniently. It would affect thousands of folks and where would they all go?"

"You don't have the vote in Washington so there's nothing you can say. You can't buck the government. You live longer if you become reconciled to it."

"People ain't got nowhere to live now. Tear down more houses to take care of traffic? I don't see no sense in it—in any of them. They're tearing down places now all over town—making parking lots out of them. They're looking out for traffic. They're doing all they can for people passing through; how about people living here?"

"I have lived here since 1921. They say old people don't live long after moving out from places they have been living in a long time. There's no place for an old woman. Nursing homes are expensive. My sister is paying \$75 a week."

"And you can tell whoever you are working for that I want to be relocated in Silver Spring or Takoma Park. I want to live in one of those apartment buildings that's got a swimming pool and be able to get out with my white neighbors. Sure I know why they want to get that freeway through here, it's so the white folks will have a better way to get to the suburbs. Man, I'm sick of it up to here."

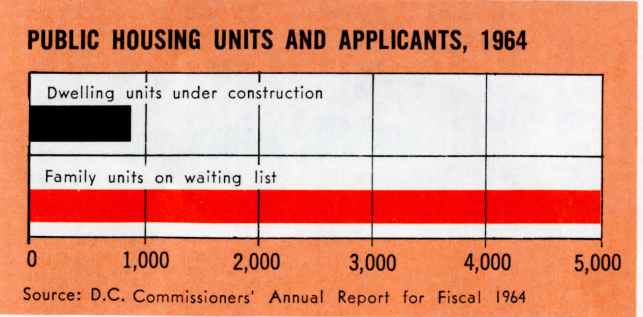
"I think it's just awful. All or many of these people have been living in this neighborhood for forty years or more. Why do they have to go around taking people's homes, especially old people? How are they going to live? At our age we just don't want to move. My husband can't get around anymore, and all our friends are in the neighborhood, too."

"What's going to become of these people?"¹⁵

That would be the responsibility primarily of the National Capital Housing Authority, at least in theory. While homes are being razed for highways, other taxable property is being razed for new public housing to try to keep up with the long waiting list of applicants.

The Commissioners' annual report for Fiscal 1964 reported that the Housing Authority, as of July 1, 1964, had 898 dwelling units under construction. The waiting list, however, was over 5,000 applicants:

"The units under construction included 470 especially designed to meet the living problems and needs of the elderly and 263 units with three or more bedrooms which are critically needed as a relocation resource for large families displaced by public action. The Authority's total waiting list of over 5000 included 3536 applicant families needing units with three or more bedrooms. Of these, 384 had already been displaced by public action."



¹⁵ Health & Welfare Council of the National Capital Area, "North Leg of the Inner Loop," November, 1963.

The District's original \$50 million highway plan submitted in 1941 promised to "pay enormous dividends in highway safety. Such a program would be justified on a safety basis alone."

1940 had been the worst year for traffic accidents in Washington's history. Almost 4,000 persons (5.9 of every 1,000 residents) had been killed or injured on District highways.

The dividends of this program were not what was promised.

In 1964, after an investment of \$400 million in major highway improvements, Washington's toll of persons killed or injured in traffic accidents was 10,970 (13.6 of every 1,000 residents).

The same experience has been true in the suburbs, with traffic accidents rising faster than population growth. Throughout the Washington metropolitan area the risk to life and limb in traffic accidents had risen by one half between 1959 and 1964 (from 7.5 persons killed or injured per thousand to 11.1).

TRAFFIC FATALITIES, WASHINGTON AREA 1959-64

	D. C.	Maryland	Virginia	Total
1959	63	71	47	181
1960	72	88	55	215
1961	60	71	45	176
1962	65	106	53	224
1963	98	93	75	266
1964	115	109	75	299

Source: D.C. Department of Motor Vehicles.

PERSONS KILLED OR INJURED IN TRAFFIC ACCIDENTS
Washington Metropolitan Area

	D. C. (Per 1,000 Persons)	Md. (Per 1,000 Persons)	Va. (Per 1,000 Persons)	Total (Per 1,000 Persons)
1940	3,933 (5.9)			
1941	4,896 (6.4)			
1942	4,311 (5.3)			
1943	3,079 (3.5)			
1944	3,313 (3.8)			
1945	3,805 (4.4)			
1946	4,740 (5.5)			
1947	4,834 (5.3)			
1948	4,863 (5.5)			
1949	5,446 (6.5)			
1950	5,815 (7.3)			
1951	6,071 (7.4)			
1952	6,534 (8.0)			
1953	6,435 (7.9)			
1954	6,346 (7.9)			
1955	7,128 (9.0)			
1956	7,296 (9.4)			
1957	7,096 (9.0)			
1958	7,143 (9.1)			
1959	8,139 (10.5)	4,053 (6.2)	2,401 (4.7)	14,593 (7.5)
1960	7,894 (10.4)	5,183 (7.4)	2,863 (5.4)	15,940 (8.0)
1961	8,410 (10.9)	6,012 (8.1)	3,206 (5.8)	17,628 (8.5)
1962	9,160 (11.6)	7,205 (9.2)	2,948 (5.1)	19,313 (9.0)
1963	10,418 (13.1)	8,575 (10.3)	3,700 (6.1)	22,693 (10.1)
1964	10,970 (13.6)	10,129 (11.4)	4,847 (7.6)	25,946 (11.1)

Source: D.C. Police Department; D.C. Department of Motor Vehicles.

By devoting 100% of all public capital investment to the promotion of travel by automobile, the Washington area is discovering, directly through the traffic accident statistics and indirectly through the insurance check, that it is investing in the least safe mode of travel:

PASSENGER FATALITY RATES 1963

Per hundred million passenger-miles

Rail travel	0.07	Bus travel	0.23
Air travel	0.12	Auto travel	2.30

Source: Interstate Commerce Commission

Nor are the public dangers limited to those walking or riding on the public highways. Last August, Bruce Hogarth, former District Air Pollution officer, reported:

"There is good reason to believe that photo-chemical smog here is higher than in any other East Coast city and I am reasonably convinced it is going to grow."

Smog, putting it simply, results from a reaction of sunlight with air pollutants—primarily auto exhaust. Washington, Mr. Hogarth noted, "has too many cars, too much sun and not enough wind." The frequency of smog conditions in Washington, he said, increased 400% from 1961 to 1963 and, for the first six months of 1964, was very close to that of Los Angeles.

"He said that should a period of stagnation—no wind—last for more than a few days the situation could become dangerous here.

"Mr. Hogarth said that short periods of stagnation occur here once or twice a year—usually in the late summer and early fall. It is not uncommon here in that season for people to experience eye irritation, sore throats and breathing difficulty.

"Longer periods of stagnation killed 18 people in 1948 in Donora, Pa., and resulted in some 4000 deaths in London in 1952." 16

autos vs. transit

None of the \$400 million invested in major highway projects in Washington over the past quarter century was advertised as being injurious to transit. To the contrary, they were to be "complementary."

The author of the initial \$50 million plan in 1941 contemplated that "mass transportation can and should supplant much of the individual vehicular service into the central business areas."

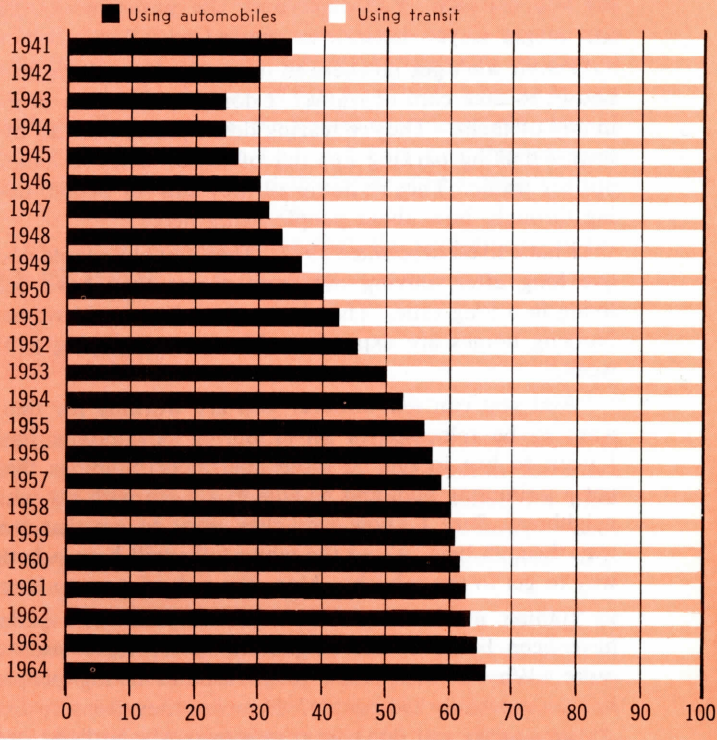
The District's current billion-dollar highway proposal bears the same label: allegedly, the addition of 38 more lanes of freeways from the suburbs to the central city is not "competitive" with public transit, only "complementary" representing a "balanced transportation system."

In the past quarter century, it hasn't worked out that way.

From 1941 through 1948, 65% or more of the commuters working in "Metro Center" used public transit. Then, as new bridges and arterial highways were opened and the downtown parking supply increased, transit riding rapidly fell off. Currently, it is estimated that only one-

16 "LA's Dirty Air Beats Ours By a Nose," Washington Daily News, August 12, 1964.

WASHINGTON'S "MODAL SPLIT"
Percentage of Commuters Using Transit or Auto to Metro Center during Peak Hour, 1941-64



Source: Northwest Committee for Transportation Planning, as compiled from periodic origin-destination and home-to-work analyses by government agencies with interpolations for intermediate years from reported vehicular traffic and transit passenger counts.

Note: Walkers not included. Of the persons employed in Metro Center, the percentage walking to work declined from 16% in 1940 to less than 4% in 1961.

MOTOR VEHICLES CROSSING D.C. LINE
Average Weekday Traffic

	Montgomery County Line	Prince Georges County Line	Virginia Bridges	Total
1940	—	—	105,627	—
1941	101,269	107,460	121,332	330,061
1942	—	—	109,206	—
1943	—	—	87,868	—
1944	—	—	90,339	—
1945	—	—	103,150	—
1946	100,445	109,049	129,232	338,726
1947	105,929	117,866	134,840	358,638
1948	111,964	129,734	146,649	388,347
1949	123,194	154,025	161,623	438,842
1950	134,957	176,503	182,323	493,783
1951	151,015	194,027	199,659	544,701
1952	161,293	203,876	208,281	573,450
1953	167,556	212,812	212,890	593,258
1954	173,840	237,404	216,625	627,869
1955	192,981	270,824	227,155	690,960
1956	198,272	280,166	237,261	715,699
1957	196,953	286,173	240,095	723,221
1958	201,024	311,205	249,133	761,362
1959	224,610	346,240	262,509	833,359
1960	231,348	367,395	264,864	863,607
1961	240,621	385,147	274,509	900,277
1962	249,443	419,069	281,693	950,205
1963	253,294	441,453	284,913	979,660
1964	248,000*	457,000*	295,000*	1,000,000*

Source: D.C. Highway Department, 1941-63.

*1964—Preliminary estimate by Northwest Committee for Transportation Planning.

third of the peak-hour riders to "Metro Center" uses public transit. The remainder ride in automobiles, averaging less than two persons per car.

Public transit, instead of "supplanting much of the individual vehicular service into the central business district," has been largely supplanted by the automobile. Public works, instead of promoting public transit, has been encouraging more private transportation.

Between 1946 and 1964, the area's population grew more than 70%. In the same time span, the area's transit passengers declined 57%, and the average daily vehicular traffic entering and leaving Washington increased almost 200%.

what are the alternatives?

"Washington," wrote Lewis Mumford, "has proved a classic testing station for the question of whether a city dedicated wholeheartedly to traffic could sufficiently survive for any other purposes."

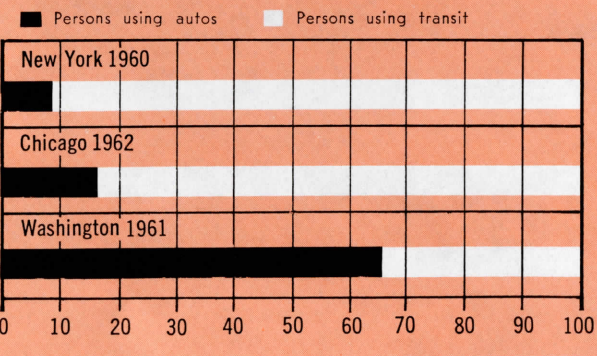
"Already it is plain in Washington—and will become plainer as the city receives the inundation of new expressways, which recklessly spoil every view and defile every approach to its finest urban prospects—that when traffic takes precedence over all other urban functions, it can no longer perform its own role, that of facilitating meeting and intercourse. The assumed right of the private motor car to go to any place in the city and park anywhere is nothing less than a license to destroy the city. L'Enfant's plan, by its very invitation to traffic, has now proved its own worst enemy." 17

This view has been echoed by dozens of leading city architects and strongly criticized by dozens of leading highway engineers, convinced their traffic projections require redoubled highway building efforts.

Is there some other way?

Cities with populations and commuters far higher than Washington have found that with comprehensive rapid transit systems they need fewer highways than Washington already has.

MODE OF TRAVEL
Persons Entering CBD at Peak AM Hour (percentage)



During the morning peak hours in 1961, 140,000 persons entered Washington's Metro Center—66% by auto and 34% by transit.

17 Lewis Mumford, *The City in History*, p. 408 (1961).

Downtown Chicago (smaller in area) had 50% more people entering at the rush hour, but barely one-third as many automobiles. 83% used public transit.

Downtown New York (50% larger in area) had 700,000 more peak-hour commuters than Washington. Yet, even it had fewer automobiles. 91% used public transit.

MODE OF TRAVEL
Persons Entering CBD at Peak AM Hour

	New York ¹ (1960)	Chicago ² (1962)	Washington ³ (1961)
Rapid Transit	608,000	71,000	0
Commuter Railroad	91,000	73,000	0
Ferry	10,000	0	0
Bus	53,000	32,000	48,000
Automobile	79,000	35,000	92,000
	841,000	210,000	140,000

¹ Regional Plan Association, "Hub-Bound Travel" (1961)

² Chicago Transit Authority

³ National Capital Transportation Agency, Study of Bus Rapid Transit Operations, Appendix IV, p. 61 (July 1963)—covers "Metro Center."

Washington doesn't know what relief may be possible through rapid transit because it has never had such a system. And, if starting such a system is accompanied by the present billion-dollar highway program, it may be wondered if the relief that rapid transit promises may ever be realized.

The *Year 2,000 Plan*, issued by the National Capital Planning Commission in 1961, announced as a primary transportation goal for metropolitan Washington:

"Every attempt should be made to encourage rush-hour use of transit to and from Metro-Center."

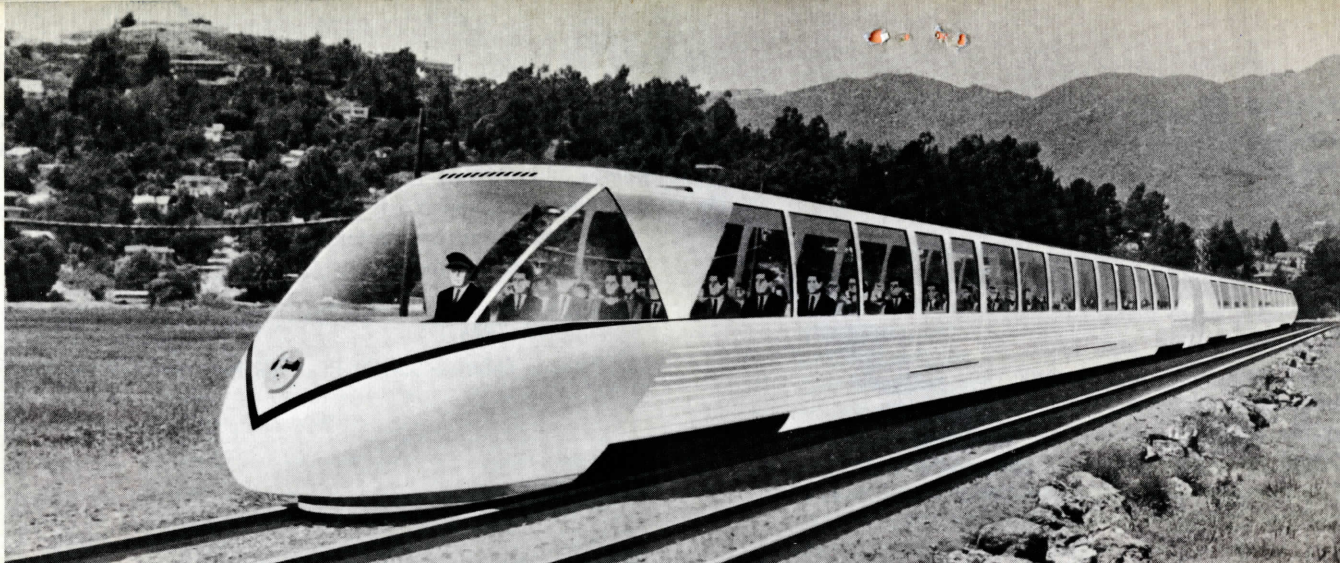
Beneath this admonition, the *Year 2,000 Plan* adds: "Although the transit systems will be built to the highest possible standards, most automobile users will be diverted to these systems only after congestion on the highways reaches intolerable levels."

The public may wonder if the commuter is so inclined toward auto travel why Washington's highway engineers, advocating a "balanced transportation system," wish to add to the Washington area freeway system (already the most extensive in the country) 38 new freeway lanes from the suburbs to the central city, draining up to 68,000 future customers from the unborn rapid transit system. 18

But, what if rapid transit is delayed? How can Washington accommodate the intervening increase in travel demand?

One sector of Washington has been waiting 15 years, without any evidence of adverse results. The last major addition to the arterial highways through Northwest Washington, west of Rock Creek and north of M Street, was the widening of Foxhall Road from Reservoir Road to Whitehaven Street in 1950. Since that time, four arterial freeways have been proposed for this corridor to "relieve" it of forecast traffic congestion—a Rock Creek Park Freeway, a Palisades Freeway, a Glover-Archbold Expressway and a Northwest Freeway. Each has been abandoned as a

18 Urban freeways can carry up to 2,000 vehicles per lane. Of the 38 radial freeway lanes proposed, 18 would be inbound, 18 outbound and 2 reversible. Average occupancy per car is 1.7 persons.



Computer-programmed trains will be used in "at grade" and subway operations by San Francisco's Bay Area Rapid Transit District

result of violent citizen and Congressional protest. Despite the highway engineers' warnings, this area has preferred the status quo.

This civic perversity saved the D.C. Highway Department over \$100 million in projects abandoned. It also may well have averted the very evils that the highways were supposed to prevent. Instead of predicted blight, the area has been a model of private renewal. Instead of confronting intolerable congestion, traffic increases in this section have been less than in other corridors leading to the central city. Although more Montgomery County suburbanites have used their cars to commute through Northwest Washington to work, more Northwest residents have left their cars at home to use public transit. In 1930, when residents in all other sections of Washington commuted to Metro Center mostly by transit, the transit usage in Northwest Washington was only 39%. The most recent survey (1961) showed that transit usage for commuting to Metro Center had risen to 57% from Northwest Washington, while transit usage dropped precipitously in other corridors, such as Northeast, where freeways had been constructed. As a result, total vehicular traffic as it entered Metro Center from Northwest was actually less in 1963 than it had been eight years before.¹⁹

With the completion of the Capital Beltway in August 1964, traffic from Montgomery County to Washington experienced a sharp drop. Elsewhere, even in corridors where new freeways had been built, arterial traffic was lagging far behind the highway engineers' predictions of only a few years before. Despite the opening of Theodore Roosevelt Bridge in June 1964, average weekday traffic on the Virginia-Washington bridges in March 1965 was almost 2,000 less than it had been a year before. Traffic on Memorial Bridge was at its lowest point in 11 years. On all Potomac River bridges, including the two Capital Beltway bridges, traffic in March 1965 was 111,000 less

per day than had been forecast for 1965 only six years before.²⁰

While highway engineers have searched for explanations for their forecasting errors, others have welcomed the unexpected relief from the traffic predictions of yesteryear as an opportunity for a new appraisal. Have we, indeed, placed undue faith in the engineers' traffic computers and abandoned the goals of urban living?

To several critics, the issue is not autos versus transit but autos versus the city. Either the promotion of urban values predominates, leading to the gradual attrition of automobiles, or else promotion of automobiles predominates, leading to the erosion of cities.²¹

There are others, however, who continue to believe that Washington and other cities are so infatuated with the automobile, particularly in the hands of the commuter, that truly urban values must continue to be sacrificed to achieve the motorists' utopia.

In rebuttal to this view, perhaps the advice of Lewis Mumford to the American Institute of Architects was more than mere whimsy:

"Forget the damned motor cars; design the cities for friends and lovers."²²

Washington has never lacked for plans for cars. Is it not time to begin planning a city for people?

THE COMMITTEE ON URBAN CONSERVATION

Washington, D. C.

Rear Admiral Neill S. Phillips
U.S.N. Ret., Honorary Chairman

Credits for this report

Research and text	Peter S. Craig
Design and layout	Sam Abbott
Cover photos	Martin Broffman

For information and additional copies:

Mrs. Robert H. Bruton, Executive Secretary
7325 Takoma Avenue Washington, D. C. 20012

¹⁹ See House District Committee Hearings on H.R. 11022, pp. 119-20, 126 (1964).

²⁰ District of Columbia Highway Department Traffic Counts on Potomac River Bridges, Committee Print for use of House District Committee, April 30, 1965, pp. 37-42.

²¹ See "Erosion of Cities or Attrition of Automobiles," chapter 18 of Jane Jacobs' *Death and Life of Great American Cities* (1961). See also "The Taming of the Motorcar," chapter 16 of Victor Gruen's *The Heart Of Our Cities* (1964).

²² As quoted by C. W. Griffin, Jr., "Car Snobs, Commuters, and Chaos," *Harpers Magazine*, July, 1962.